

CLAIMS

1. A concrete block surface treatment machine for treating selected exposed surfaces of a concrete block, comprising:

- a frame;
- 5 - an elongated hammer member defining opposite first and second extremities spacedly carried by said frame, and an intermediate portion located between said first and second extremities;
- mounting means mounting said hammer member first and second extremities to said frame to allow movement of said hammer member intermediate portion between a first position wherein said hammer member intermediate portion is destined to clear an adjacent concrete block to be surface-treated, and a second position wherein said hammer member intermediate portion is destined to impact the concrete block to be surface-treated; and
- 10 - a selectively powered hammer actuator carried by said frame and capable of selectively moving said hammer member intermediate portion between said first and second positions.

15 2. A concrete block surface treatment machine as defined in claim 1, wherein said mounting means also allow movement of said hammer member first and second extremities between said first and second positions, with said hammer actuator moving said first and second extremities concomitantly with said intermediate portion.

20 3. A concrete block surface treatment machine as defined in claim 2, wherein said hammer member comprises an elongated support element carrying a number of strikers at said

hammer member intermediate portion, said strikers being movable with respect to one another and destined to impact the concrete block to be surface-treated.

4. A concrete block surface treatment machine as defined in claim 3, wherein
5 said support element is flexible and loosely carried by said frame.

5. A concrete block surface treatment machine as defined in claim 4, wherein
said support element is a chain and said strikers are chain links.

10 6. A concrete block surface treatment machine as defined in claim 4, wherein
said support element is a chain and said strikers are a number of rigid striker rings that each define a
central bore engaged by said chain.

15 7. A concrete block surface treatment machine as defined in claim 3, wherein
said support element is a rigid rod and said strikers are rigid striker rings that each define a central
bore loosely engaged by said rigid rod whereby said striker rings are movable relative to one another
and relative to said rod.

20 8. A concrete block surface treatment machine as defined in claim 2, wherein
said mounting means comprises a reciprocating hammer support which may be displaced by said
hammer actuator in a reciprocating motion to correspondingly displace said hammer member
intermediate portion between said first and second positions.

9. A concrete block surface treatment machine as defined in claim 8, wherein said hammer support is reciprocatingly pivotable in an arc between first and second positions corresponding to first and second positions of said hammer member intermediate portion.

5 10. A concrete block surface treatment machine as define in claim 1, further comprising at least one additional elongated hammer member defining opposite first and second extremities spacedly carried by said frame, and an intermediate portion located between said first and second extremities;

10 wherein said mounting means also mount said additional hammer member first and second extremities to said frame to allow movement of said additional hammer member intermediate portion between a first position wherein said additional hammer member intermediate portion is destined to clear an adjacent concrete block to be surface-treated, and a second position wherein said additional hammer member intermediate portion is destined to impact the concrete block to be surface-treated; and wherein said selectively powered hammer actuator is capable of selectively 15 moving said additional hammer member intermediate portion between said first and second positions.

11. A concrete block surface treatment machine for treating selected exposed surfaces of a concrete block, comprising:

20 - a frame;
- a hammer member;
- mounting means mounting said hammer member to said frame while allowing movement of said hammer member between a first position wherein said hammer member is destined to clear an

adjacent concrete block to be surface-treated, and a second position wherein said hammer member is destined to impact the concrete block to be surface-treated; and

- a selectively powered hammer actuator carried by said frame and capable of selectively moving said hammer member between said first and second positions;

5 wherein the movement of said hammer member between said first and second positions comprises a reciprocating movement component.

12. A concrete block surface treatment machine as defined in claim 11, wherein said hammer member is elongated and defines opposite first and second extremities spacedly carried by said frame, and an intermediate portion located between said first and second extremities.

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12. A concrete block surface treatment machine as defined in claim 12, wherein said hammer member comprises an elongated support element carrying a number of strikers at said hammer member intermediate portion, said strikers being movable with respect to one another and 15 destined to impact the concrete block to be surface-treated.

14. A concrete block surface treatment machine as defined in claim 13, wherein said support element is a rigid rod and said strikers are rigid striker rings that each define a central bore loosely engaged by said rigid rod whereby said striker rings are movable relative to one another 20 and relative to said rod.

15. A concrete block surface treatment machine as defined in claim 11, wherein said mounting means comprises a reciprocating hammer support which may be displaced by said

hammer actuator in a reciprocating motion to correspondingly displace said hammer member between said first and second positions.

16. A concrete block surface treatment machine as defined in claim 15, wherein
5 said hammer support is reciprocatingly pivotable in an arc between first and second positions
corresponding to first and second positions of said hammer member.

17. A concrete block surface treatment machine as defined in claim 11, further
comprising at least one additional elongated hammer member defining opposite first and second
10 extremities spacedly carried by said frame, and an intermediate portion located between said first
and second extremities;

wherein said mounting means also mount said additional hammer member first and second
extremities to said frame to allow movement of said additional hammer member intermediate
portion between a first position wherein said additional hammer member intermediate portion is
15 destined to clear an adjacent concrete block to be surface-treated, and a second position wherein said
additional hammer member intermediate portion is destined to impact the concrete block to be
surface-treated; and wherein said selectively powered hammer actuator is capable of selectively
moving said additional hammer member intermediate portion between said first and second
positions.

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18. A concrete block surface treatment machine as defined in claim 17, wherein
said mounting means comprise hammer supports that are shared by the first-named said hammer
member and by said additional hammer member.

19. A method for surface-treating a concrete block, comprising the following steps:

- a) positioning the concrete block in front of a concrete block surface treatment machine; and
- b) reciprocatingly moving at least one hammer member between a first position wherein said hammer member clears the concrete block, and a second position wherein said hammer member impacts the concrete block.

10 20. A method for surface-treating a concrete block as defined in claim 19, with said hammer member comprising an elongated support member defining opposite first and second extremities spacedly carried by a frame of said concrete block surface treatment machine, and an intermediate portion located between said first and second extremities and carrying a number of striker rings each having a central bore loosely engaged by said elongated support element, wherein step (b) further comprises loosely moving said striker rings relative to said elongated support element and relative to one another for allowing said striker rings to impact said concrete block
15 without the movement of said support element directly impacting said concrete block.